

**REMARKS**

The Applicants do not believe that examination of this response will result in the introduction of new matter into the present application for invention. Therefore, the Applicants, respectfully, request that this response be entered in and that the claims to the present application, kindly, be reconsidered.

The Final Office Action dated August 1, 2005 has been received and considered by the Applicants. Claims 1-20 are pending in the present application for invention. Claims 1-20 are rejected by the August 1, 2005 Final Office Action.

The Final Office Action states that the oath or declaration is defective. The Applicants submitted a proper oath and declaration on August 3, 2001. Accordingly, the Applicants respectfully request that the Examiner provide details regarding this objection. Is the Examiner referring to the oath and declaration submitted on August 3, 2001? If the examiner is referring to the oath and declaration submitted on August 3, 2001, please provide detail for the problems that exist with this oath and declaration.

The Final Office Action rejects Claim 4 under the provisions of 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. The Applicants, respectfully, point out that Claim 4 is not intended and that this rejection is actually a rejection to Claim 9. Accordingly, this rejection is in error, and the Applicants will respond to this rejection as a rejection to Claim 9. Claim 9 was amended in the previous response submitted by the Applicants as reproduced below.

Claim 9 (currently amended): An apparatus according to claim 1, wherein the second signal is embedded in the first signal ~~by selecting~~ as a key for at least partly encrypting the information wherein the key is selected from one of at least two groups of keys.

The foregoing amendment to the claims has removed the previous amendment to Claim 9 to obviate this rejection.

Claim 9, after amendment, reads exactly as it did prior the previous amendment, e. g. so that Claim 9 reads after the foregoing amendment "the second signal is embedded in the first signal by selecting a key for at least partly encrypting the information from one of at least two groups of keys." The Applicants, respectfully, submit that the previous amendment to Claim

9 was not necessary. The terminology for "the second signal is embedded in the first signal by selecting a key for at least partly encrypting the information from one of at least two groups of keys," is stated exactly on page 5, lines 22-25 of the specification. The passage following page 5, lines 22-25 of the specification clearly describe how to embed the signal using a key. Therefore, Claim 9 as amended is patentable under the provisions of 35 U.S.C. §112, second paragraph.

The Office Action rejects Claim 8 under the provisions of 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention. The Applicants, respectfully, point out that Claim 8 defines subject matter wherein the linear feedback shift register is over Galois Field GF(s), and its output is  $1/s$  biased by interpreting emitted symbols "0"... 's-n-1' as 'unencrypted' and 's-n'...'s-1' as 'encrypted'. The specification on page 5, lines 15-21 clearly discusses this subject matter and defines the foregoing terminology. Current patent practice within the USPTO and the courts agree that applicants can be their own lexicographer. As stated in the MPEP as §2111.01 that an "applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)." See *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). The clear definition of the term  $1/s$  bias is given on page 5, lines 13-15 as out of every s packs, 1 is encrypted and s-1 are unencrypted. Therefore, the interpretation suggested by the Examiner of the terminology "0"... 's-n-1' as 'unencrypted' and 's-n'...'s-1' as 'encrypted' is incorrect. The correct interpretation is that provided within the specification to the present invention as discussed above that for every s packs, 1 is encrypted and s-1 are unencrypted. Accordingly, the terminology that is the subject of this rejection is defined within the specification in a definite manner that particularly points and distinctly claims the subject matter of the invention. Therefore, this rejection is traversed.

The Office Action rejects Claims 1-20, under the provisions of 35 U.S.C. §103(a) as being unpatentable over International Publ. No. WO 99/11020 (*Glogau et al.*) in view of an article within *C.B.S. Proceedings of the IEEE*, Volume: 87, Issue: 7, July 1999, pp. 1267-1276), entitled "Copy protection for DVD video", authored by Bloom, J.A.; Cox,

I.J.; Kalker, T.; Linnartz, J.-P.M.G.; Miller, M.L.; Traw, (hereinafter referred to as Bloom et al.) and further in view of U.S. Patent No. 5,940,134 issued to Wirtz (hereinafter referred to as Wirtz).

The Examiner further states that Glogau et al. do not teach the first signal in which a second signal is logically embedded. The Examiner asserts that Bloom et al. teach the subject matter for the first signal in which a second signal is logically embedded.

The Examiner further states that Bloom et al. teach the first signal/physical mark in which a second signal is logically embedded, and which could be used for refusing play back of the information read from the information carrier if a second signal but no physical mark were detected. The Applicants respectfully point out that this a seemingly impossible construction. The Examiner appears to be reading the first signal and the physical mark as being one in the same with the second signal being the ticket taught by Bloom et al. being embedded within the within the wobble groove (the physical mark). This construction is impossible because the rejected claims define subject matter for "if a second signal but no physical mark are detected". Therefore, the rejected claims can not be read so broadly to as to encompass the wobble groove as the first signal because this is not possible in view of the wording of the rejected claims. The first signal can not be the physical mark. Accordingly, the rejection does not address all the elements defined by the rejected claims.

There is no disclosure or suggestion within Bloom et al. for a second signal that is logically embedded in the first signal indicating that a physical mark is used for storing at least part of the information on the information carrier. Additionally, there is no disclosure or suggestion within Bloom et al. for the second signal to contain a single bit trigger that may be used for refusing play back of the information read from the information carrier if a second signal but no physical mark has been detected.

The Examiner states that Wirtz teaches that the first signal/physical mark in which a second signal is logically embedded, and which could be used for refusing play back of the information read from the information carrier if a second signal but no physical mark were detected. The Applicants, respectfully point out that Wirtz teaches to check the embedded watermark against the disc's wobble key and reproduce the signal

if the authenticity of the signal is acknowledged. The Examiner appears to be reading the first signal and the physical mark as being one in the same with the second signal being the disc's wobble key taught by Wirtz being embedded within the within the wobble groove (the physical mark). This construction is impossible because the rejected claims define subject matter for "if a second signal but no physical mark are detected".

Therefore, the rejected claims can not be read so broadly that the first signal encompasses the wobble groove because this is not possible in view of the wording of the rejected claims. The first signal can not be the physical mark. Accordingly, the rejection does not address all the elements defined by the rejected claims.

This rejection does not make a prima facie case of obviousness.

Therefore, this rejection is respectfully traversed.

The Applicants further disagree with the assertion contained within the Final Office Action that it is well known to place employ a single bit trigger as the second signal. The Applicants, respectfully, assert that the Official Notice taken regarding the use a single bit trigger is in error. The Examiner cites Lysakowski; however the Examiner takes the recitation out of context and employs a hindsight approach to pick and choose the elements defined by the rejected claims from among various prior art references. There is no disclosure or suggestion within Lysakowski or any of the cited references for a second signal logically embedded in the first signal wherein the second signal contains a single bit trigger. Therefore, this rejection is respectfully traversed.

The Examiner previous stated that Glogau et al. do not teach the first signal in which a second signal is logically embedded. The Examiner asserts that Bloom et al. teach the subject matter for the first signal in which a second signal is logically embedded. In item 38 on page 9 of the Final Office Action the Examiner then states that Glogau et al. teach the second signal is embedded in the first signal by encoding it in a pseudo-random noise pattern of encrypted unencrypted packs of the first signal, wherein the encryption sequence generated is based on a linear feedback shift register. The Applicants disagree. Page 2, lines 14-17 of Glogau et al. provide no disclosure or suggestion for the subject matter for the first signal in which a second signal is logically embedded. Therefore, this rejection is traversed.

The statements within paragraph 39 of the Final Office Action regarding the use of polynomial (such as Galois) being obvious is unsupported. The Examiner is using hindsight to recreate the subject matter defined by the rejected claims. The Applicants assert that it is not obvious to use polynomials (such as Galois) in a manner as defined by the rejected claims. Therefore, this rejection is traversed.

The statements within paragraph 40 of the Final Office Action regarding the use of XOR function rendering obvious the subject matter for interpreting symbols is unsupported. The Examiner is using hindsight to recreate the subject matter defined by the rejected claims. The Applicants assert that it is not obvious to interpret the symbols as defined by  $0 \dots s-n-1$  as unencrypted and  $s-n \dots s-1$  as being encrypted in a manner as defined by the rejected claims. Therefore, this rejection is traversed.

The Final Office Action rejects Claims 2, 15 and 18 in view of Official Notice. The Applicants respectfully submit that it is not well known to place the subject matter defined by the rejected claims on to a CD. Therefore, this rejection is traversed.

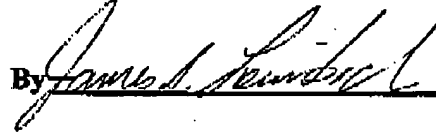
The Applicants further disagree with the assertion contained within the Office Action that it is well known to place and employ a single bit trigger as the second signal. Therefore, this rejection is respectfully traversed.

The Applicants further disagree with the assertion contained within the Office Action that it is well known to use as the second signal a key selected from at least two groups of keys for encryption. Therefore, this rejection is respectfully traversed.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

Respectfully submitted,

By 

James D. Leimbach  
Patent Attorney Reg. No. 34,374

Please address all correspondence for this application to:  
Michael E. Belk, Senior Intellectual Property Counsel  
Philips Intellectual Property & Standards  
Philips Electronics N.A. Corp.  
P.O. Box 3001  
Briarcliff Manor, NY 10510-8001 USA  
(914) 333-9643,

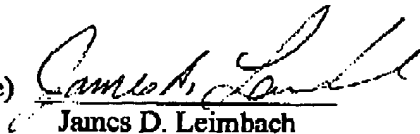
**CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence  
is being transmitted on this date via  
facsimile transmission to (571) 273-8300 AND addressed to:  
Mail Stop: Amendment  
COMMISSIONER OF PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Date of Transmission: October 28, 2005

(Signature)

By:

  
James D. Leimbach